



To examine Clinical Characteristics for the Detection of Cervical Cancer, According to a Checkup in Andijan Region

**Dilnoza Isakova¹, Oltinoy Yakubova², Yorkinoy Farmankulova³,
Matkarimov Bakhtiyorjon⁴, Ranokhon Solieva⁵, Dilduzahon Mamarasulova⁶**

¹Assistant, Faculty of Advanced Medical Training and Re-training, Department of Obstetrics and Gynecology, Andijan State Medical Institute, Andijan, Uzbekistan; ²PhD, Docent, Head of Faculty of Advanced Medical Training and Re-training, Department of Obstetrics and Gynecology, Andijan State Medical Institute, Andijan, Uzbekistan; ³Assistant, Department of Facultative Pediatric and Neonatology, Andijan State Medical Institute, Andijan, Uzbekistan; ⁴Ph.D, Academician, Associate Professor, Department of General Surgery, Andijan State Medical Institute, Andijan, Uzbekistan; ⁵Postdoctoral Scientific Researcher, Department of the Chair Obstetrics and Gynecology, Andijan State Medical Institute, Andijan, Uzbekistan; ⁶MD, Associate Professor, Head of the Department of Oncology and Medical Radiology, Andijan State Medical Institute, Andijan, Uzbekistan.

ABSTRACT

Precancerous and background processes are characterized by the proliferation of epithelial cells leading to the subsequent glandular polyps, true and false cervical erosion, endocervicitis, ectropion, papillation, and foci of leukoplakia. The greatest clinical importance in the area of the junction of the stratified squamous epithelium of the vaginal portion of the cervix and the columnar epithelium of the cervical canal, as in this zone most often develop pathological processes. Depending on the age of the woman and the state of hormonal balance the junction of two epithelial cells can be located at different levels. From the neonatal period until the end of puberty, the joint may be below the level of the external uterine OS, leaving the vaginal portion of the cervix. In the reproductive age (from 20-22 to 40-45 years old) place of transition epithelia is at the level of the external pharynx, and in pre climate period or post-menopausal condition can be displaced into the cervical canal, becoming inaccessible for visual inspection, making it difficult to identify pathological processes.

Key Words: Cervical cancer, Screening, Pregnancy, Diseases

INTRODUCTION

According to the analysis in 2018, in the Republic of Uzbekistan were revealed 3307 patients, including cervical cancer (CC) 1653, ovarian cancer (OC) 829, uterine cancer (RTM) 641, trophoblastic disease (TB) 98, vulvar cancer (PB) 61 and cancer of the vagina (RVL) 25 cases. Rural women – 1793 patients (54,2%). The age of patients ranged from 9 years and older than 80. The peak incidence of SARS was age 55-59 years (569 cases).¹

The greatest number of patients TORS consisted of patients with cervical cancer, RTM, and OC, most of which were diagnosed in stage II of the disease, 55,7%, with 39.9% and 32.3%, respectively. Mortality remained high in patients with cervical cancer of 2.6 (862) and OC -1,4 (463), and in patients, RTMS was 0.7 (234). 5-year survival rate was

47.3% (2188) of RTM in patients, 40,6% (3342) in patients with cervical cancer and 39.1% (1530) OC patients.²

The incidence of cervical cancer in the Republic of Uzbekistan in 2018 and won second place in the structure as total cancer incidence and morbidity among women after breast cancer. Screening, broad coverage of preventive inspections of all segments of the female population, promotion of healthy lifestyles, early diagnosis, and treatment of diseases of the reproductive organs will significantly reduce the number of women in high-risk groups to SORT.³

According to Dzhanlich, for the period 2014-2018, the number of women with cervical cancer for the first time registered was increased from 1387 to 1653, while the incidence rate also increased from 4.6 to 5.0 per 100,000 populations over the past 5 years. The mortality rate for 2014 and 2018

Corresponding Author:

Dilnoza Isakova, Assistant, Faculty of Advanced Medical Training and Re-training, Department of Obstetrics and Gynecology, Andijan State Medical Institute, Andijan, Uzbekistan; Email: jovohir99@mail.ru

ISSN: 2231-2196 (Print)

ISSN: 0975-5241 (Online)

Received: 16.04.2020

Revised: 29.05.2020

Accepted: 12.06.2020

Published: 22.07.2020

was 2.2 and 2.6 per 100,000 thousand of the population, with absolute numbers of deaths in 2014 – 669 women, and in 2018 - 862 women. Cervical cancer patients in stages III-IV in 2014 lost 48.2%; in 2015, 36.8%; in 2016, 30.1%; in 2017 - 36.1% and in 2018 - 27.5%. That is, there are fewer patients with advanced forms of cervical cancer from year to year, namely, 20.7% of patients in III-IV have become fewer, which is not a bad indicator in the oncological service. The analysis showed that cervical cancer has a tendency to increase in the Republic of Uzbekistan and takes 3rd place in the structure of oncological morbidity after breast and stomach cancer in 2018.⁴

According to Abdulkarimov U.G. The incidence rate of cervical cancer in the Bukhara region in 2017-2018 tend to increase. So in 2017-2018 cervical cancer was more common in such areas of the region as Bukhara, the age of patients ranged from 30-70 years, more often cervical cancer affected patients of the first group, the ratio was 1: 4, respectively. In 2018, it was 1: 3 more often in the Kagan, Bukhara, and Shafrikan regions. In 2017, among women of the same age group, it was 1: 6; In 2018, in Gijduvan and Shafrikan districts, it was 1:13, which is a relatively high indicator, mainly women of the II age group were sick. In 2017-2018, the lowest rate was recorded in Karaulbazar, Vabkent, and Peshkun regions.⁷

MATERIALS AND METHODS

Studies based on the screening of 787 women and selected from among 79 women with cervical pathology in age from 18 to 72 years and 21 healthy female volunteers who applied for examination in the period from 2019 to 2020. In all the studied patients were carefully assembled medical history, including reproductive, comorbidity, explored the subjective and objective status for the purpose of prevention and early diagnosis of malignant tumors of the cervix. Also, patients have conducted colposcopy, the study of the tumor marker SCC, and cytomorphology of the material.

RESULTS

All subjects were matched for age, menstrual function, parity of pregnancy and childbirth, the frequency of transferred surgical interventions, and the registration frequency of somatic and endocrine of diseases.

The result is a comprehensive survey of women and we recorded 4 groups, which included various pathological changes of the cervix without visible pathology:

- 1 group and control was 21 (23,3%) healthy women volunteers from the mucous of the cervix without visible pathology;

- 2 group consisted of 26 (28,9%) women who had a diagnostic want the background diseases of the cervix of which: eroded ectropion – 14 (53,8%) patients, endocervicitis – 12 (53,8%) patients;
- 3 group – 19 (21.1 percent) of women with cervical dysplasia ones: dis - plasma mild (CIN I) 2 (10,5%) patients, with moderate dysplasia (CIN II) – 8 (42,1%) patients with severe dysplasia (CIN III) 9 (47.4%) patients;
- A group of 4 – 24 (26,7%) female patients with cervical cancer with stage I - she – 6 (25%) patients, II stage – 12 (50%) and III stages of the disease – 6 (25%) patients (Fig. 1).

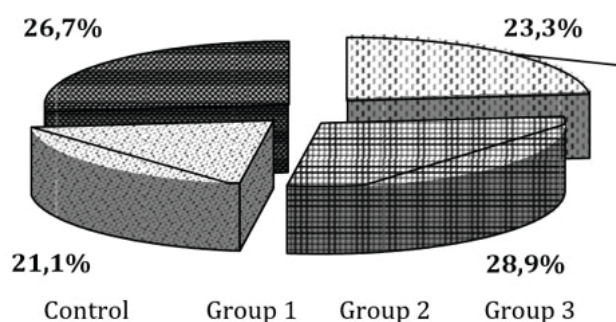


Figure 1: The distribution of the surveyed women into groups

Almost 2/3 of the women examined were in active reproductive age (Table 1).

Table 1: Distribution of women examined by age

Age	Group 1		Group 2	
	abs	%	abs	%
17-44	14	53,8	21	80,8
45-64	7	26,9	5	19,2
> 65	0	0,0	0	0,0
Total	21	23,3	26	28,9

Age	Group 3		Group 4	
	abs	%	abs	%
17-44	10	52,6	14	58,3
45-64	9	47,4	8	33,3
> 65	0	0,0	2	8,3
Total	19	21,1	24	26,7

The groups do not reliably differ by age. The average age of the women examined in the groups did not statistically differ significantly from each other (Fig. 2).

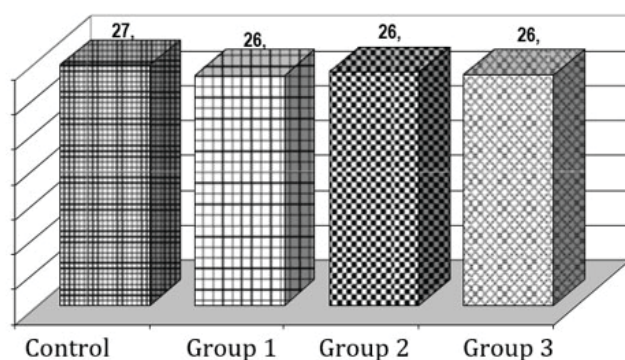


Figure 2: The average age of the women surveyed by groups.

Women who have had more babies, who had a history of cervical ruptures, cervical injuries during childbirth, a complicated course of childbirth make up the majority of cases when there were background diseases, cervical dysplasia, and cervical cancer (Fig. 3).

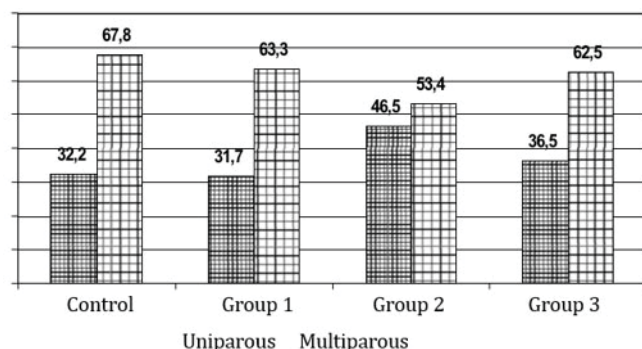


Figure 3: The incidence of women depending on the number of births.

Urinary tract infections and anemia, as well as respiratory diseases, diseases of the digestive system, and the cardiovascular system occupy a significant place in the structure of transferred extragenital diseases in the examined women.

Table 2: Extragenital diseases in the examined women

Extragenital diseases	Group 1, n=21		Group 2, n=26	
	abs	%	abs	%
Inf. Urinary excretory ways	1	4,8	3	11,5
Glomerulonephritis	1	4,8	2	7,7
Chr. cholecystitis	2	9,5	3	11,5
Chr. hepatitis	2	9,5	1	3,8
Frequent ARVI	8	38,1	12	46,2
Pneumonia	1	4,8	2	10,0
Obesity	1	4,8	2	10,0
Anemia	6	28,6	8	40,0
Cardiovascular diseases	3	14,3	1	5,0

Extragenital diseases	Group 3, n=19		Group 4 (n=24)	
	abs	%	abs	%
Inf. Urinary excretory ways	1	5,3	4	16,7
Glomerulonephritis	2	10,5	0	0,0
Chr. cholecystitis	2	10,5	1	4,2
Chr. hepatitis	3	15,8	1	4,2
Frequent ARVI	8	42,1	9	37,5
Pneumonia	0	0,0	2	8,3
Obesity	3	2,3	2	8,3
Anemia	5	3,8	18	75,0
Cardiovascular diseases	2	1,5	3	12,5

DISCUSSION

Colposcopy was performed for all examined 90 patients. Simple colposcopy included an examination of the vaginal part of the cervix after the removal of detachable from the surface, which determined the shape, size of the cervix and external OS, the color and relief of the mucous membrane, the border of the flat and cylindrical epithelium, the features of the vascular pattern.

When the expanded colposcopy examination of the cervix was carried out by using different tests:

- drawing on the vaginal portion of the cervix 3% acetic acid allows you to clearly identify pathological changes on its surface, such as transient edema of the epithelium, swelling of the cells SIPO prominent layer, the reduction of the subepithelial vessels, reducing blood supply to the tissues. The action of the solution manifests itself in 30-60 seconds, lasts 3-4 minutes so that the papillary structure plots cover - ing columnar epithelium becomes more clear, with normal vessels disappear briefly, atypical change not;
- Schiller's test – cervix was as usual with a cotton swab and smase - get 3% Lugol solution. Under normal Lugol's iodine, Mature squamous epithelium rich in glycogen is painted in dark brown color. For some background, precancerous and cancerous diseases of the cervix as a result of the depletion of glycogen cells, thinning of the squamous epithelium of abnormal areas do not stain with a solution of the Liu-Gaulle, there is the so-called "iodine negative zone", indicating the atypical nature of the epithelium. Schiller's test, allows you to clearly distinguish normal flat multilayer epithelium from diseased and define the outside border of the lesion.

When our study was observed following colposcopic patterns:

Pseudo (SYN. endocervicitis) – a piece of the vaginal portion of the cervix, covered by cylindrical epithelium, around the cervix. There was a very characteristic colposcopic picture - botryoidal clusters of bright red small globular or end of the oblong papillae. When applying 3% acetic acid, which causes contraction of blood vessels and intermittent edema of the epithelium, ASOC - Ki became more prominent and resembled a bunch of grapes.

True erosion is the thinning of stratified squamous epithelium, following the result of the low content of glycogen is associated with the age-related features.

Dysplasia is a condition in which atypical is defined ProLife - radio cells and the violation of layering, without involvement in the pathological process of the surface layer of the stratified squamous epithelium of the cervix. There are three degrees of dysplasia: mild, moderate, and severe. The co-dependent currently, the term CIN – cervical intraepithelial non - aplasia introduced in order to represent the dynamics of the process, i.e. as an ongoing and evolving process, starting with dysplasia and Ca in situ via turning into invasive cancer. There are also III grade CIN. Typically, 85-90% of women, the disease develops on the background of long-existing pseudo⁹.

Simple atypical epithelium – slightly severe ProLife - ration of the epithelium at the level of the mucosa.

High atypical epithelium – changes characterized by you through the world of epithelial proliferation, rising above the level of the mucosa. When applying 3% acetic acid these sites PUR - of retail mosaic structure, pink dots on a background of whitish areas.

Papilloma – a focal growth of multilayer flat epithelium with signs of keratinization, pink or whitish in color, clearly demarcated from the surrounding tissue, in some cases, the appearance is suspicious for an exophytic form of cancer.

In that we studied groups of women, except the first group, ecofit - wide manifestations of HPV infection was characterized by various Colfosco - scopic pictures. Among them there were papillomatous growths, which were represented by separate transparent papillae, forming a rosette. The location of these sockets on the mucous membrane of the cervix have been both focal and multicentric in nature.

Each efficacy proliferating multilayered epithelium was determined by an enhanced vascular loop that is kidney-shaped. Vascular loop positioning - Lis on the surface of the papilloma evenly, chaotic location with vessels characteristic of cancer was observed. When applying on the cervix 3% acetic acid resulted in lower blood vessels and paleness of the mucous membrane, and when processed with 3% Lugol's iodine papilloma were stained in dark brown color stained the surrounding papilloma the mucous membrane, which indirectly may indicate beningn process.

Replacement of columnar epithelium squamous called “zone of transformation” or transformation. In most cases, the given point process is of a benign nature⁹. Colposcopically time Lescaut unfinished and complete the transformation zone.

Areas of atypical vascularization is a tree branching, blood vessels that are located randomly.

Also, if colposcopy was identified pathologically processes associated with the human papillomavirus (HPV), which has a number of colposcopic signs of varying severity.

Clinical example: Patient On, 35yo (history 639) came for a visit to the gynecologist purely routine inspection, complaints special didn't show was only a slight dragging pain in the abdomen.

From history: six Months ago in a private clinic removes a polyp of the cervix, after which at this place formed an ulcer.

The words of the patient, the heredity is not burdened, bad habits denies. Pregnancies were 2, delivery-1, abortion-1.

On examination, the patient's condition is satisfactory. Of the internal organs, pathology was not determined. During the inspection of the external genitals are developed correctly.

In the mirrors cervix cylindrical shape, deformed by the presence of education located on the front lip size 0,5x1,5 cm with a flat surface. The vaginal mucosa is pale pink. Watery discharge.

When vaginal study (PVS) the body of the uterus of normal sizes, dense consistency, without pain. The cervix is enlarged, deformed, dense consistency. Marked shortening of the arches to the right with parametrial infiltration not extending to pelvic bones. The parameters left free. X-rays from 02.03.2019 - from the lungs and heart revealed no pathology.

Ultrasound from 02.03.2019. The liver is located in the right upper quadrant, its size is not enlarged. The contours of the liver are smooth, clear. The angle of the right lobe is less than 75°, left -45°. The structure of the liver is homogeneous. The vessels are viewed all over. The diameter of the portal vein 11 mm. The diameter of the common bile duct is 4 mm. the Gall-bladder oval-shaped, walls smooth, clear, thickness-2 mm, Content homogeneous.

Kidneys – located in a typical place, the size of both kidneys was normal. Parenchyma and CHLS were unchanged.

In the pelvis behind the bladder visualized the uterus in position anteflexion, size 60x47x58 mm, the contours of the body of the uterus is a smooth, clear structure of the myometrium homogeneous, endometrium 4 mm, homogeneous (1 phase). Cervix size 56x42-51 mm, with irregular, indistinct contours, the deformed, the structure is heterogeneous. On the anterior wall of the cervix is determined by education,

without clear contours. The cervical canal is misshapen, uneven, thickened to 7mm. Appendages on the right – 30x25x28 mm, left – 29x 26x30 mm cavity turning diameters of 10 mm. Inguinal / iliac lymph nodes were not visualized.

CONCLUSION

According to the ultrasound pattern typical of disease of the cervix. Cr. Colli uteri. At colposcopy was detected pathological area on the sample gave a suspicious lesion (treatment with methylene blue marks the whitish area due to the lack of glycogen in the pathological area) is one of the most important features of determination of cervical cancer and differentiation of precancerous diseases.

The sick were Schiller's test and morphological study of tumors of the cervix, histology from 7.03.19.- squamous cell carcinoma of the cervix. Conducted laboratory research methods. General analysis of blood (from 02.03.05.) Hb-90 g/l, er. - 3.1 x 10¹²/l, CPU - 0, 9, leukocytes 4.8 x 10⁹/l, platelets - 236.8 X10⁹/l, ESR - 44 mm/ h.

Urinalysis (from 02.03.19.) protein – 0,033 %, leukocytes 16-20 insight. Blood biochemical parameters in the norm. A comprehensive clinical, laboratory, ultrasonic, and morphological study has allowed establishing the diagnosis of Cr Colli uteri, T1 N0M0 stage 11, 11 clinical groups.

Patient surgical treatment with subsequent radiotherapy. Screening 787 women, showed that background and precancerous lesions were found in 2.7 cases pre –3.3%, cervical cancer at 3.0% of cases.

Recommendations

Based on the study of the available literature of the last years they dedicated to cervical cancer, it is possible to formulate a number of General issues that are most controversial to be addressed.

First and foremost, this is a common problem growth of cervical cancer in the last 15-20 years in all countries, both developed and developing. It was particularly disturbing that there is a widespread rejuvenation of cervical cancer, i.e. the disease affects young women, of childbearing age, and with a significantly worse prognosis.

Secondly, there is the problem of scaling-up of HPV infection, especially among young girls and women of childbearing age.

Third, the development and selection of methods for the detection of HPV infection and pinpoint the exact pathogenicity of the virus and the prediction of the development of precancer and cervical cancer.

Fourth, the selection of the necessary timing of the screenings, and, in the end, the choice of the survey methods used in the screening subject to their availability, accuracy, and cost.

Acknowledgement: Authors acknowledge the immense help received from the scholars whose articles are cited and included in references of this manuscript. The authors are also grateful to authors / editors / publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed.

Conflict of interest: None

Financial support: None

REFERENCES

1. Henry C. Kitchener Vaccine for cervical cancer prevention / edited by Peter L. stern, Henry C. Kitchener. - M.: Medpress-inform, 2009. - 192 p.
2. Diseases of the cervix. - M.: GEOTAR-Media, 2014. - 160 p.
3. Diseases of the cervix. Clinic, diagnostics, treatment. Textbook / T. V. Ovsyannikov and others - M.: Medpress-inform, 2013. - 673 p.
4. Diseases of the cervix. Modern methods of diagnosis and treatment. - M.: Publishing house of Nizhny Novgorod state medical Academy, 2006. - 112 p.
5. Mamarasulova D. Z. Personalized medicine: new or well-forgotten old?/European science review-2017-№3-4. DOI:http://dx.doi.org/10.20534/ESR-17-3.4-52-54
6. Stepanov, N. With. Hypnosis and cancer: practical Experience / N. With. Stepanov. - Moscow: Rostov n/D: Feniks, 2007. - 224 p.
7. Titov, V. A. Automated radiation therapy for cancer of the female reproductive organs / V. A. Titova, N. In. Kharchenko, I. V. Stolyarova. - M.: Medicine, 2006. - 160 p.
8. Khachatryan, A. R. Colposcopy. Foundations of algorithms of diagnostics and tactics of management of the cervical disease. Methodical recommendations / A. R. Khachatryan, L. V. Martina. - M: N-L, 2011. - 523 p.
9. Hawk, John Leather. Sunlight and skin cancer. Everything you need to know / John hawk, Jane McGregor. - Moscow: AST, Astrel, 2006. - 870 p.